

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

27

PUBLICATION NUMBER : 08225911
PUBLICATION DATE : 03-09-96

APPLICATION DATE : 15-02-95
APPLICATION NUMBER : 07026964

APPLICANT : SHINKO METAL PROD KK;

INVENTOR : FURUYA MASA HARU;

INT.CL. : C23C 4/10 C23C 4/02 C25B 11/10 C25D 17/10 C25D 17/12

TITLE : THERMAL SPRAY COATING ELECTRODE EXCELLENT IN DURABILITY AND ITS PRODUCTION

ABSTRACT : PURPOSE: To form a dense film high in adhesion and also low in electric resistance by forming a magnetite film having a specified thickness on the surface of a Ti base material by a plasma spraying.

CONSTITUTION: The magnetite film having 100-80 μ m thickness is formed on the surface of the Ti base material. In order to improve performance, the surface of the Ti base material is subjected to a blast treatment, and the surface is subjected to a sputtering treatment by a plasma flame under an atmosphere of 50-300hPa to activate the surface. The magnetite film having 30-300 μ m thickness is formed by the plasma spraying using a magnetite powder having 5-50 μ m grain size under the same atmosphere. The second magnetite film having 50-500 μ m thickness is formed by the plasma spraying using the magnetite powder having 10-100 μ m grain size under an atmospheric atmosphere. An effective surface area is enlarged and a large current power supply is possible when the film is formed by using coarse particles.

COPYRIGHT: (C) JPO

*Abstraktion eines Magnetitbelag
auf Titan durch Plasmaspritzen*